

# MARKET ANNOUNCEMENT

## TEM Geophysics Surveys Completed Site Preparations Complete for Drilling Commencement

### SUMMARY

- Lithium Energy's Solaroz Lithium Brine Project is located in the highly prospective Lithium Triangle in Argentina and is directly adjacent to or principally surrounded by lithium majors Allkem Limited (ASX/TSX:AKE) and Lithium Americas Corporation (TSX/NYSE:LAC)
- TEM geophysics site surveys are now completed
- Geophysics interpretation is progressing to build a complete picture of the Solaroz Project for a comprehensive drilling program over the expansive tenure
- The first hole to be located at the Mario Angel concession which is ~10km from Allkem's production bore field and ~ 3km to the Maria Victoria concession which was recently acquired by Allkem (see Figure 3)
- Site preparation works for drilling first hole now complete (see Figures 1 and 2) with the contracted drilling rig to mobilise imminently
- The initial drilling programme will seek to validate the Exploration Target previously announced by the Company and define a maiden JORC Mineral Resource of lithium at Solaroz

Lithium Energy Limited (ASX:LEL) (**Lithium Energy** or **Company**) is pleased to provide an update on the progress of its exploration programme at its highly prospective flagship Solaroz Lithium Brine Project, located in Argentina in the heart of South America's Lithium Triangle (**Solaroz**). Solaroz is located directly adjacent to or principally surrounded by lithium majors Allkem Limited (ASX/TSX:AKE) and Lithium Americas Corporation (TSX/NYSE:LAC) (refer Figure 1).



## Completion of TEM Geophysics

As previously reported<sup>1</sup>, Lithium Energy has been undertaking a series of geophysical surveys<sup>2</sup> over the Solaroz concession area as part of an extensive exploration programme towards defining a maiden JORC Mineral Resource of lithium at Solaroz.

Lithium Energy is pleased to advise that the collection of site data from Transient Electromagnetic geophysics (**TEM**) surveys undertaken across the Solaroz tenure has now been successfully completed. The data collected will now be interpreted in conjunction with collected Passive Seismic data, to build up a complete three-dimensional model of the potentially lithium rich conductive brines at Solaroz.

Lithium Energy notes that interpretation of previous results indicate the presence of significant quantities of conductive brines in the Solaroz concession area, with indicated brine thicknesses up to 300 metres and to depths up to 500 metres below surface in sections<sup>1</sup>. Conductive brines such as those currently being mined by Allkem in adjoining concessions are a key pathfinder for the occurrence of lithium in the Olaroz Salar that demonstrate similar geophysical signatures.<sup>4</sup>

## Drilling Set to Commence at Prospective Mario Angel Site

The interpretation of the geophysics data collected to date has enabled Lithium Energy to finalise the optimal locations for the commencement of its planned 5,000 metre drilling programme, with the maiden drill hole location now set within the Mario Angel concession (Figure 1).

The proposed first hole is located in close proximity to Allkem's existing production assets and less than ~3km from the Maria Victoria concession, which Allkem recently announced they have entered into a binding and conditional Heads of Agreement to acquire as a 'strategic lithium tenement'.<sup>3</sup>

The recent interpretation of geophysics undertaken at this drill location together with its close proximity to Allkem's production assets, leads Lithium Energy to believe this site to be highly prospective for lithium bearing brines.

Siteworks at Mario Angel are now complete (refer Figures 1 and 2) ready for the contracted drilling rig to mobilise to site.

The initial drilling programme will comprise a combination of diamond and rotary holes, to be undertaken by a drilling contractor with extensive experience in the Olaroz Salar.

This drilling will test the extent and grades of lithium mineralisation, porosity and flow rates across the layer(s) of conductive brines which have been identified by the geophysics. This information will then be interpreted to develop a potential maiden JORC Mineral Resource for Solaroz.

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1 Refer LEL ASX Announcement dated 18 August 2022: Highly Encouraging Geophysics Paves Way for Commencement of Drill Testing of Brines at Solaroz

2 Passive Seismic surveys are being used to determine the base of the underlying basement rock, with the basement defining the theoretical depth limit of potential lithium mineralisation. Transient Electromagnetic geophysics (**TEM**) measures electrical conductivity at depth and are being used to identify the depth of conductive brines (i.e. salty water with low electrical resistivity) above the basement rocks identified by the Passive Seismic programme.

3 Refer Allkem ASX Announcement dated 15 August 2022: Allkem to acquire strategic tenement in exchange for Borax



Figures 1 and 2: Site preparations for drilling first hole at Solaroz (Mario Angel Concession)

**Exploration Objective**

The objective of Lithium Energy’s exploration programme is to define a maiden JORC Mineral Resource of lithium from its substantial 12,000 hectare concession area on the Salar de Olaroz basin (**Olaroz Salar**), where Allkem Limited (formerly Orocobre Limited) has been producing lithium since 2015 (under a joint venture with Toyota Tsusho Corporation (TYO:8015)) and Lithium Americas Corporation is advancing its Cauchari-Olaroz development project (under a joint venture with Ganfeng Lithium).

Lithium Energy has previously defined an Exploration Target<sup>4</sup> for Solaroz of:

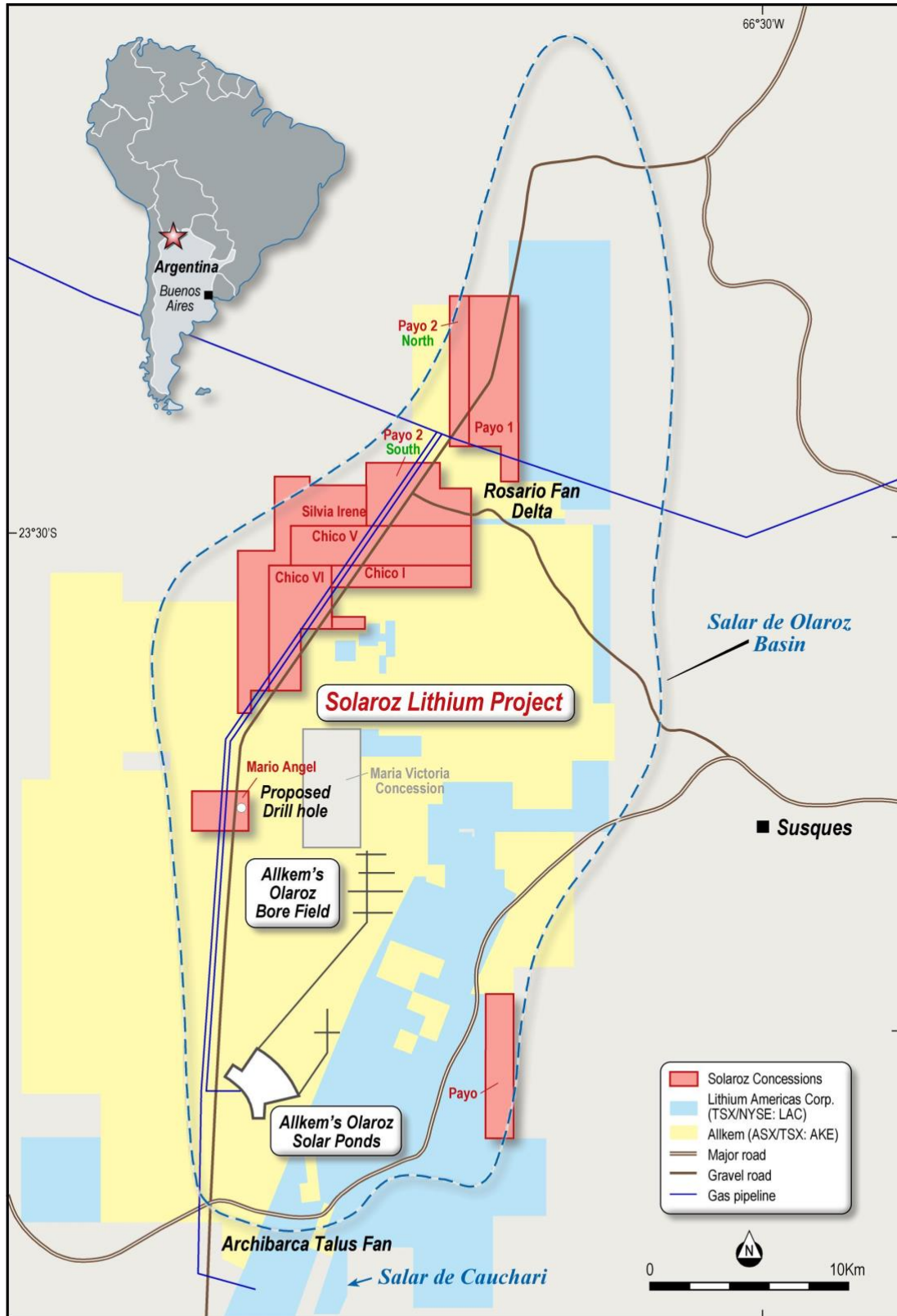
**1.5 to 8.7 million tonnes of contained Lithium Carbonate Equivalent (LCE) based on a range of lithium concentrations of between circa 500 mg/L Lithium (Li) and 700 mg/L Li,**

based primarily on Lithium Energy’s assessment of the results of previous exploration work undertaken by Allkem and Lithium Americas in the neighbouring area on the Olaroz Salar.

*The Exploration Target’s potential quantity and grade is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.*

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<sup>4</sup> Refer LEL ASX Announcement dated 8 June 2021: Substantial Lithium Exploration Target Identified at the Solaroz Project in Argentina



**LITHIUM ENERGY LTD** **Solaroz Lithium Project, Argentina**  
**Solaroz Concessions Location Plan**  
[www.lithiumenergy.com.au](http://www.lithiumenergy.com.au)

Figure 3: Proposed Maiden Drill Hole Location on Mario Angel Concession at Solaroz (Solaroz Concession Locations Adjacent to Allkem and Lithium Americas Concessions in Olaroz Salar)



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**ABOUT LITHIUM ENERGY LIMITED (ASX:LEL)**

Lithium Energy Limited is an ASX listed battery minerals company which is developing its flagship Solaroz Lithium Brine Project in Argentina and the Burke Graphite Project in Queensland. The Solaroz Lithium Project (LEL:90%) comprises 12,000 hectares of highly prospective lithium mineral concessions located strategically within the Salar de Olaroz Basin in South America's "Lithium Triangle" in north-west Argentina. The Solaroz Lithium Project is directly adjacent to or principally surrounded by mineral concessions being developed into production by Orocobre Limited (ASX/TSX:ORE) and Lithium Americas Corporation (TSX/NYSE:LAC). The Burke Graphite Project (LEL:100%) contains a high grade graphite deposit and presents an opportunity to participate in the anticipated growth in demand for graphite and graphite related products. LEL was spun out of Strike Resources Limited (ASX:SRK) via a \$9 million IPO; Strike remains a major (43%) shareholder of the Company.

**JORC CODE COMPETENT PERSON'S STATEMENTS**

The information in this document that relates to Exploration Results (in relation to the passive seismic and TEM geophysics work) are based on, and fairly represents, information and supporting documentation prepared by Mr Peter Smith, BSc (Geophysics) (Sydney) AIG ASEG. Mr Smith is a Member of the Australian Institute of Geoscientists (AIG) and an Executive Director of the Company. Mr Smith has the requisite experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the **JORC Code**). Mr Smith consents to the inclusion in this document of the matters based on his information in the form and context in which it appears.

The information in this document that relates to Exploration Targets and other Exploration Results in relation to the Solaroz Lithium Project is extracted from the following ASX market announcements made by Lithium Energy dated:

- 18 August 2022: Highly Encouraging Geophysics Paves Way for Commencement of Drill Testing of Brines at Solaroz
- 9 May 2022: Geophysics Expanded Across all Concessions to Refine Drill Targets at Solaroz Lithium Project
- 8 June 2021 entitled "Substantial Lithium Exploration Target Identified at the Solaroz Project in Argentina"
- 26 May 2021 entitled "Geophysical Data Supports Highly Encouraging Exploration Potential for Solaroz"

The information in the original announcements is based on, and fairly represents, information and supporting documentation prepared and compiled by Mr Peter Smith (BSc (Geophysics) (Sydney) AIG ASEG). Mr Smith is a Member of the Australian Institute of Geoscientists (AIG) and a Director of the Company. Mr Smith has the requisite experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (the **JORC Code**). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements (referred to above). The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements (referred to above).

**FORWARD LOOKING STATEMENTS**

This document contains "forward-looking statements" and "forward-looking information", including statements and forecasts which include without limitation, expectations regarding future performance, costs, production levels or rates, mineral reserves and resources, the financial position of Lithium Energy, industry growth and other trend projections. Often, but not always, forward-looking information can be identified by the use of words such as "plans", "expects", "is expected", "is expecting", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates", or "believes", or variations (including negative variations) of such words and phrases, or state that certain actions, events or results "may", "could", "would", "might", or "will" be taken, occur or be achieved. Such information is based on assumptions and judgements of management regarding future events and results. The purpose of forward-looking information is to provide the audience with information about management's expectations and plans. Readers are cautioned that forward-looking information involves known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Lithium Energy and/or its subsidiaries to be materially different from any future results, performance or achievements expressed or implied by the forward-looking information. Such factors include, among others, changes in market conditions, future prices of minerals/commodities, the actual results of current production, development and/or exploration activities, changes in project parameters as plans continue to be refined, variations in grade or recovery rates, plant and/or equipment failure and the possibility of cost overruns. Forward-looking information and statements are based on the reasonable assumptions, estimates, analysis and opinions of management made in light of its experience and its perception of trends, current conditions and expected developments, as well as other factors that management believes to be relevant and reasonable in the circumstances at the date such statements are made, but which may prove to be incorrect. Lithium Energy believes that the assumptions and expectations reflected in such forward-looking statements and information are reasonable. Readers are cautioned that the foregoing list is not exhaustive of all factors and assumptions which may have been used. Lithium Energy does not undertake to update any forward-looking information or statements, except in accordance with applicable securities laws.